In the Claims

Please cancel 1-41 without prejudice. Please amend the claims by adding the following new claims.

1-41. (Canceled)

42. (New) A method of treating, preventing or ameliorating a hepatitis B virus (HBV) infection in a subject, comprising

administering to the subject a composition comprising nucleic acid molecules containing at least one unmethylated CpG dinucleotide, and wherein the composition is administered in an amount sufficient to treat, prevent or ameliorate the HBV infection in the subject.

43. (New) The method of claim 42, wherein the nucleic acid molecules comprise the sequence 5' TCG 3'.

44. (New) The method of claim 43, wherein the nucleic acid molecules comprise the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

45. (New) The method of claim 44, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-AACGTTCC-3', and 5'-GACGTTCC-3'.

46. (New) The method of claim 44, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-TCCATAACGTTCCTGATGCT-3' (SEQ ID NO:3); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:7); 5'-TCCAAGACGTTCCTGATGCT-3' (SEQ ID NO:9); 5'-TCCATGACGTTCCTGACGTT-3' (SEQ ID NO:10); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:35) and 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:54).

47. (New) The method of claim 42, wherein the subject is a mammal.

48. (New) The method of claim 42, wherein administration is intravenous or subcutaneous.

49. (New) The method of any of claims 42-48, further comprising administering a HBV antigen or vaccine.

50. (New) A method of treating, preventing or ameliorating a hepatitis B virus (HBV) infection in a subject, comprising

administering to the subject a composition comprising nucleic acid molecules containing at least one unmethylated CpG dinucleotide, wherein an antigen of the virus is not administered in conjunction with administration of the composition, and wherein the composition is administered in an amount sufficient to treat, prevent or ameliorate the HBV infection in the subject.

51. (New) The method of claim 50, wherein the nucleic acid molecules comprise the sequence 5' TCG 3'.

52. (New) The method of claim 51, wherein the nucleic acid molecules comprise the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

53. (New) The method of claim 52, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-AACGTTCC-3', and 5'-GACGTTCC-3'.

54. (New) The method of claim 52, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-TCCATAACGTTCCTGATGCT-3' (SEQ ID NO:3); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:7); 5'-TCCAAGACGTTCCTGATGCT-3' (SEQ ID NO:9); 5'-TCCATGACGTTCCTGACGTT-3' (SEQ ID NO:10); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:35) and 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:54).

55. (New) The method of claim 50, wherein the subject is a mammal.

56. (New) The method of claim 50, wherein administration is intravenous or subcutaneous.

57. (New) A method of treating, preventing or ameliorating a hepatitis virus (HBV) infection in a subject, comprising

administering to the subject a composition comprising nucleic acid molecules containing at least one unmethylated CpG dinucleotide, wherein the composition is free of HBV antigen, and wherein the composition is administered in an amount sufficient to treat, prevent or ameliorate the HBV infection in the subject.

58. (New) The method of claim 57, wherein the nucleic acid molecules comprise the sequence 5' TCG 3'.

59. (New) The method of claim 58, wherein the nucleic acid molecules comprise the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

60. (New) The method of claim 58, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-AACGTTCC-3', and 5'-GACGTTCC-3'.

61. (New) The method of claim 58, wherein the nucleic acid molecules comprise a sequence selected from the group consisting of 5'-TCCATAACGTTCCTGATGCT-3' (SEQ ID NO:3); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:7); 5'-TCCAAGACGTTCCTGATGCT-3' (SEQ ID NO:9); 5'-TCCATGACGTTCCTGACGTT-3' (SEQ ID NO:10); 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:35) and 5'-TCCATGACGTTCCTGATGCT-3' (SEQ ID NO:54).

62. (New) The method of claim 57, wherein the subject is a mammal.

63. (New) The method of claim 57, wherein administration is intravenous or subcutaneous.

64. (New) A method of reducing viremia in an individual infected with hepatitis B virus (HBV), comprising administering a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein an HBV antigen is not administered in conjunction with administration of said composition, and wherein said composition is administered in an amount sufficient to reduce HBV viremia.

65. (New) The method of claim 64, wherein the ISS comprises the sequence 5'-T, C, G-3'.

66. (New) The method of claim 64, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

67. (New) The method of claim 66, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3' and 5'-GACGTTCC-3'.

68. (New) The method of claim 64, wherein the individual is a mammal.

69. (New) The method of claim 64, wherein administration is intravenous or subcutaneous.

70. (New) A method of reducing blood levels of a hepatitis virus antigen in an individual infected with hepatitis B virus (HBV), comprising administering a composition comprising a polynucleotide comprising an immunostimulatory sequence (ISS) to said individual, wherein the ISS comprises the sequence 5'-C, G-3', wherein an HBV antigen is not administered in conjunction with administration of said composition, and wherein said composition is administered in an amount sufficient to reduce blood levels of a hepatitis virus antigen.

71. (New) The method of claim 70, wherein the ISS comprises the sequence 5'-T, C, G-3'.

72. (New) The method of claim 70, wherein the ISS comprises the sequence 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, G-3' or 5'-purine, purine, C, G, pyrimidine, pyrimidine, C, C-3'.

73. (New) The method of claim 72, wherein the ISS comprises a sequence selected from the group consisting of 5'-AACGTTCC-3' and 5'-GACGTTCC-3'.

74. (New) The method of claim 70, wherein the individual is a mammal.

75. (New) The method of claim 70, wherein administration is intravenous or subcutaneous.

76. (New) The method of claim 67, wherein the hepatitis virus antigen is HBsAg.